Criminality in France. — "Society, in its moral and social aspect," says M. Lacassagne, "is divided into three strata, — the frontal, the parietal, and the occipital; the latter including the most of our race." The causes which operate upon the human organism are cosmic and social; or, as M. Lacassagne has it, physico-chemic, biologic, and social. The first includes temperature, physical forces, aliment, etc., acting, first, upon the posterior part of the brain, thence forward, influencing the instinct to control the intelligence. The second includes sex, age, heredity, temperament, acting equally on all parts of the brain, and giving to the sentiments, thoughts, and acts a characteristic peculiarity. The last, acting from the front brain backwards, modifies the ideas before changing the sentiments.

The penal code of France divides infractions of the laws against persons and property into contraventions, délits, and crimes; and, for seeking out and punishing these, an army of two hundred thousand individuals is engaged, costing 41,694,720 francs, against 26,034,016 for primary public instruction.

M. Lacassagne, after reviewing the works of Quetelet, Guerry, Maury, and Ferri, on the statistics and philosophy of crime, proceeds to furnish, in a series of curves, the results of his own researches. It is well observed, that, in studying a series of years, notice must be taken of the changes in the law and the multiplication of recognized infractions. Crimes against property vary with the price of breadstuffs, the operation of tariff, warm summers, rigorous winters. Crimes against persons are shown to be influenced by revolutions, elections, the wine-crop, etc.

The relation of crime to the season of the year presents some interesting facts, the table showing a criminal calendar in which the maxima of crimes against property are placed opposite to the minima of crimes against persons. The former have their maximum in December, their minimum in April and June. The latter have their minimum in November, and their maximum in June. Each crime is then scrutinized by months, according to the causes affecting it, such as heat and cold, wine-production, harvests, forced indoor life in winter, wandering life in summer, the length of the day and night, fêtes, holy days, pay-days, reaping-time, vintage-time, salaries to domestics, etc. For instance, infanticide is large in January, February, March, and April, as the effect of the aphrodisiac months, while abortions, usually at the fifth month, are numerous in January; conceptions of harvest-time, at their maximum in March; conceptions of the new-wine season, high in May; conceptions of Christmas holidays, high in June; conceptions of the carnival, ascending in September, October, November, and December, owing to the aphrodisiac months.

Assassination, murder, parricide, poisoning, theft, are similarly treated, and the relation of crime to sex and illiteracy examined. M. Lacassagne closes his discussion with observations on the prevention of crime. — (*Bull. soc. anthrop. Lyon*, i. 48–71.) J. W. P. [1134

EARLY INSTITUTIONS.

Writing among the Romans. — M. Havet points out the curious fact, that Greece had a literature before she had the means of recording it, while Rome had the means before she had the literature. It is certain that in Greece literature existed at first independently of writing; but in Rome writing was in use during the period of the kings, when there was no literature. This fact being established, M. Havet asks whether writing was introduced during the time of the kings, or before that time, i.e., before the foundation of Rome. He then goes on to show how the Romans must have used writing before they came into contact with the Etruscans, because they did not adopt the Etruscan alphabet. Writing must have been in use, he concludes, in the earliest period of the history of Rome, if not before the foundation of the city. Then he argues, if this is the case, what right have we to suppose that the early kings are fabulous? If they knew how to write, it is probable that they put their names in writing. The question is raised, What did the Romans do with their writing, if they did not use it to record events which actually happened? They had no literature to give it a *raison d'être*. The argument is an interesting one. — (*Rev. polit. et lit.*, 24 Mars, 1883.) D. W. R. [1135

Beginnings of taxation in France. — M. Vuitry continues his studies in the financial history of France, and describes the origin and establishment of state taxes as distinguished from the revenues of a feudal sovereign. These, he tells us, must not be regarded as state taxes. He defines state taxes as taxes levied upon all citizens for the purpose of defraying public expenses. During the early feudal period there were no public expenses: therefore there were no state taxes. The expenditures of the feudal sovereign were private expenditures; his revenues were private revenues, derived chiefly from his estates, or from privileges attached to his person. It was not until the fourteenth century (1328–55) that state taxes, properly so called, were instituted. M. Vuitry explains how this came to pass. — (*Séan. trav. de l'acad.*, Avril–Mai, 1883.) D. W. R. [1136

INTELLIGENCE FROM AMERICAN SCIENTIFIC STATIONS.

GOVERNMENT ORGANIZATIONS.

Bureau of ethnology.

Note on certain Maya and Mexican manuscripts. — Professor Cyrus Thomas has recently prepared a paper for the bureau, on a plate of the *Codex Cortesianus*, reproduced in plates 9 and 10 of Rosny's *Les documents de l'antiquité Américaine*, and plate 44 of the *Fejervary Codex* (Kingsborough, vol. iii.). For the benefit of scholars devoting attention to these manuscripts, a brief *résumé* of his explanation of one discovery that he has made in regard to them is here given. As facsimile plates cannot be introduced here, plans of the portions referred to are figured on the assumption that those particularly interested have access to the works in which the plates are to be found.

Mr. Thomas maintains, with a strong array of evidence, that these plates are simply a kind of condensed calendar, and that the outer looped line of dots and day-symbols in each is a mere table by which to tell the days on which the weeks (of thirteen days) for the entire year begin.

If we examine carefully the rows of large dots, and the day-symbols in the large outer space of the Cortesian plate, as given by Rosny, we shall find, that, taken together, they form but *one continuous line*,

making one outward and two inward bends or loops at each corner, as shown in fig. 1.

In this figure the dots correspond with those in the plate; the circle, with the day-symbols. The numbers
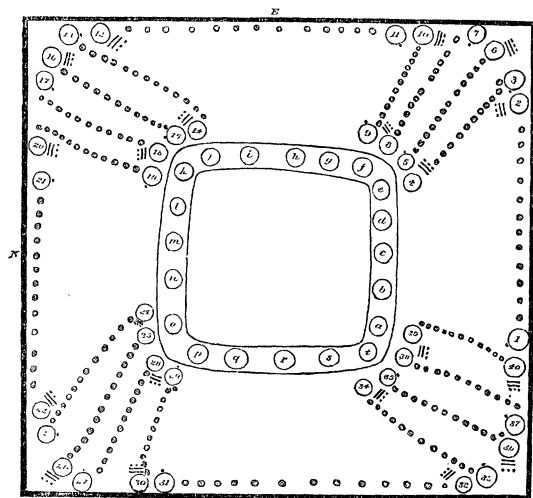

Fig. 1. — Scheme of the Cortesian plate.

correspond with the numbers in the following list, in which the names are given, as shown by the symbols; those obliterated in the original are in Italics.

1 Cauac.	15 Oc.	28 Ahau.
2 Chuen.	16 *Ik.*	29 Ymix.
3 Eb.	17 *Akbal.*	30 Ben.
4 Kan.	18 *Men.*	31 Ix.
5 Chicchan.	19 Cib.	32 Cimi.
6 Caban.	20 Lamat.	33 Manik.
7 Ezanab.	21 Muluc.	34 Cauac.
8 Oc.	22 Ymix.	35 Ahau.
9 Chuen.	23 Ik.	36 Eb.
10 Akbal.	24 Ix.	37 Ben.
11 Kan.	25 Men.	38 Chicchan.
12 Cib.	26 Manik.	39 Cimi.
13 *Caban.*	27 Lamat.	40 Eznab.
14 Muluc.		

Starting with 1 Cauac (No. 1) on the right side, and running upward toward the top, along the row of dots next the right-hand margin, we reach 13 Chuen (No. 2). Just above this is 1 Eb (No. 3). Running inward toward the centre, along the row of dots, we reach 13 Kan (No. 4). Then passing upward, we come to 1 Chicchan (No. 5); then outward along the row of dots, toward the outer corner, to 13 Caban (No. 6); thence to the left to 1 Ezanab (No. 7); then inward to 13 Oc (No. 8); then to the left to 1 Chuen (No. 9); then outward to 13 Akbal (No. 10); and so on around toward the left.

The number of the day is usually indicated by a numeral symbol, — one dot for 1, and two short lines and three dots for 13.

By commencing with *Cauac*, and writing the twenty Maya days in succession, repeating them in the same order, numbering them from 1 to 13, and 1 to 13 again, or by referring to table V. of Professor Thomas's *Study of the manuscript Troano* (fig. 11), the reader will find that the days numbered 1 of the looped

line (as 1 Cauac, 1 Eb, etc.) are always the first days of the Maya week, and those numbered 13 (as 13 Chuen, 13 Kan, etc.) are always the last days of the week.

The Cauac years alone have been referred to; but this calendar is made to answer equally as well for the Kan, Muluc, and Ix years. For the Kan years we begin with 1 Kan (No. 11) in the top row; for the Muluc years, with 1 Muluc (No. 21) in the row next to the left margin; and, for the Ix year, with 1 Ix (No. 31) in the bottom row.

The proof of Professor Thomas's interpretation of this part of the 'Cortesian plate' seems to be conclusive.

The signification of plate 44 of the Fejervary Codex he claims to be substantially the same as the other; and that the outer looped line shown in our fig. 2 is constructed on precisely the same plan, and for the same purpose; the only difference being, that here only the first day of the week is given, and that the days are Mexican instead of Maya.

The twenty circles at the corners and loops containing numbers indicate and replace Mexican day-symbols, as shown in the following list: —

1 Cipactli.	8 Malinalli.	15 *Calli.*
2 Ocelotl.	9 Coatl.	16 Cozcaquauhtli.
3 Mazatl.	10 ·Tecpatl.	17 Atl.
4 Xochitl.	11 Ozomatli.	18 Ehecatl.
5 *Acatl.*	12 Cuetzpalin.	19 Quauhtli.
6 Miquiztli.	13 Ollin.	20 *Tochtli.*
7 Quiahuitl.	14 Itzcuintli.	

The four in the larger circle, italicized in the list, are the four year-bearers or year-names.

By making a list of Mexican days in succession, beginning with Cipactli, and numbering from 1 to 13 as before, and following the line in the order
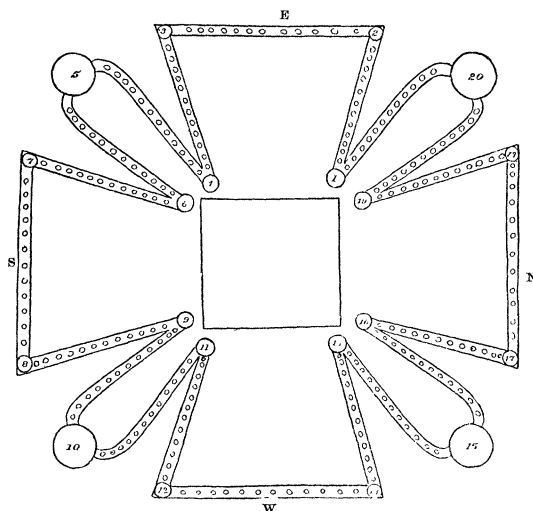

Fig. 2. — Scheme of the Fejervary plate.

of numbering, as shown in fig. 2 (around to the left), we find that each day is the first of a Mexican week.

Mr. Thomas also gives interpretations of the outer parts, but these are too long and intricate to be given in this brief article.